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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,329	04/01/2004	Naoki Yoshida	P21-169535M/ISI	5337
21254	7590	07/16/2007	EXAMINER	
MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC			HEWITT, JAMES M	
8321 OLD COURTHOUSE ROAD			ART UNIT	
SUITE 200			PAPER NUMBER	
VIENNA, VA 22182-3817			3679	
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			07/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/814,329

**Applicant(s)**

YOSHIDA, NAOKI

**Examiner**

James M. Hewitt

**Art Unit**

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 6-12 and 14-21 is/are rejected.
- 7) ☒ Claim(s) 2, 5 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Attachment A.

**DETAILED ACTION*****Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The following does not find proper antecedent basis in the specification: first connecting means; second connecting means; holding means.

***Claim Objections***

Claims 1-3 and 5-21 are objected to because of the following informalities:

The preamble of claim 1 recites “[a] piping connector *for connecting a first pipe and a second pipe*”, thus only functionally claiming the first and second pipes. Yet the body of the claim recites “a socket...attached to an end of the first pipe to be connected”, “a plug...attached to an end of the second pipe” and “wherein the first pipe and the second pipe are connected by inserting the plug to fit to the socket”, thus positively claiming the first and second pipes and making it unclear as to whether the first and second pipes are being claimed in combination with the connector.

For examination purposes, the first and second pipes have not been considered to be claimed in combination with the connector.

In claim 8, line 3, the second instance of “small” should be “large”.

The preamble of claim 20 recites “[a] piping connector *for connecting a first pipe to a second pipe*”, thus only functionally claiming the first and second pipes. Yet the

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body of the claim recites "a socket attached to an end of the first pipe" and "a plug attached to an end of the second pipe", thus positively claiming the first and second pipes and making it unclear as to whether the first and second pipes are being claimed in combination with the connector.

For examination purposes, the first and second pipes have not been considered to be claimed in combination with the connector.

In claim 20, line 6, "holding" should be "hold".

The preamble of claim 21 recites "[a] piping connector *for connecting a first pipe to a second pipe*", thus only functionally claiming the first and second pipes. Yet the body of the claim recites "first connecting means attached to an end of the first pipe" and "second connecting means attached to an end of the second pipe", thus positively claiming the first and second pipes and making it unclear as to whether the first and second pipes are being claimed in combination with the connector.

For examination purposes, the first and second pipes have not been considered to be claimed in combination with the connector.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida (JP 2003-021287).

With respect to claim 20 and with particular reference to Figures 1-7 and Attachment A, Yoshida discloses a piping connector for connecting a first pipe to a second pipe, said piping connector comprising: a socket (Figure 2); a plug (Figures 1); and a hold ring (Attachment A) fixedly attached to an inner periphery of the socket, wherein said hold ring includes a groove at an outer periphery of the holding ring.

With respect to claim 21 and with particular reference to Figures 1-7 and Attachment A, Yoshida discloses a piping connector for connecting a first pipe to a second pipe, said piping connector comprising: first connecting means (socket, see Figure 2); second connecting means (plug, see Figure 1); and holding means (hold ring, see Attachment A) attached to an inner periphery of one of said first connecting means and said second connecting means.

Note that the phrases "first connecting means", "second connecting means" and "holding means" are not considered to invoke 35 U.S.C. 112 6<sup>th</sup> paragraph as they do not meet each prong of the 3-prong analysis.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6-12 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (JP 2003-021287) in view of Attwood (US 4,911,406).

With respect to claim 1 and with particular reference to Figures 1-7, Yoshida discloses a piping connector for connecting first and second pipes comprising: a socket having a tubular shape; a plug having a tubular shape; a seal ring (o-ring) arranged at an inner periphery of the socket; and a hold ring (adjacent o-ring) fixedly attached to the inner periphery of the socket; and the hold ring includes a groove (Attachment A) having a ring-like shape at an outer periphery thereof. Yoshida fails to explicitly teach that the hold ring is welded to the inner periphery of the socket. Attwood teaches that it is known to weld a hold ring or bushing to the inner periphery of a socket. In view of Attwood's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to affix Yoshida's hold ring to the inner periphery of the socket via welding in order to permanently secure the hold ring.

With respect to the recitation "...welded to the inner periphery of the socket by ultrasonic welding", the method of forming the device is not germane to the issue of patentability of the device itself and does not serve to structurally distinguish the claims.

With respect to claim 3, wherein the inner periphery of the socket is provided with a first diameter contracted portion and a second diameter contracted portion from a side of an inserting port of the plug, and a stepped portion is formed between the first diameter contracted portion and the second diameter contracted portion. Refer to Figure 7 and Attachment A for various stepped portions between various diameter portions.

With respect to the recitation “the hold ring is pressed to the first diameter contracted portion to weld”, the method of forming the device is not germane to the issue of patentability of the device itself and does not serve to structurally distinguish the claims.

With respect to claim 6, wherein the inner periphery of the socket comprises: a first diameter contracted portion; a second diameter contracted portion; and a stepped portion formed between the first diameter contracted portion and the second diameter contracted portion. Refer to Attachment A.

With respect to claim 7, wherein said groove comprises a V-shape. Refer to Attachment A.

With respect to claim 8, wherein said hold ring comprises: a large diameter portion and a small diameter portion adjacent to the small diameter portion. Refer to Attachment A.

With respect to claim 9, wherein said groove is formed between said large diameter portion and said small diameter portion. Refer to Attachment A.

With respect to claim 10, wherein said groove is formed at an outer periphery of said large diameter portion, and said small diameter portion is formed at an end of said groove. Refer to Attachment A.

With respect to claim 11, wherein said groove comprises a wall portion having a tapered shape. Refer to Attachment A.



With respect to claim 12, wherein said groove comprises a wall portion having a tapered shape extending from a bottom portion of said groove to said small diameter portion. Refer to Attachment A.

With respect to claim 14, wherein said large diameter portion comprises an outer diameter substantially matched to an inner periphery of an inner portion of said socket. Refer to Attachment A and Figure 7.

With respect to claim 15, wherein said small diameter portion comprises an outer diameter substantially matched to an inner periphery of an inner portion of said socket. Refer to Attachment A and Figure 7.

With respect to claim 16, further comprising a stopper member (60) mounted on said socket.

With respect to claim 17, wherein said stopper member comprises a bent wire member.

With respect to claim 18, wherein said plug comprises a position projection (26) formed on an outer periphery of said plug.

With respect to claim 19, wherein said socket comprises a position projection (38) formed on an outer periphery of said socket.

#### ***Allowable Subject Matter***

Claims, 2, 5 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



### ***Response to Arguments***

Applicant's arguments, see page 14, filed 4/30/07, with respect to claim 2 have been fully considered and are persuasive. The art rejection of claim 2 has been withdrawn.

Applicant's arguments, see pages 12-13, filed 4/30/07, with respect to claims 1, 3, 6-12 and 14-21 have been fully considered but they are not persuasive. Refer to the above reading of Yoshida and Atwood, and particularly Attachment A.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

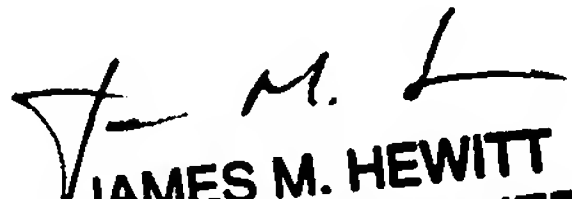
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH  
7/9/07

  
JAMES M. HEWITT  
PRIMARY EXAMINER

(6)

特開2003-21287

1st diameter contracted portion

stepped portion

2nd diameter contracted portion

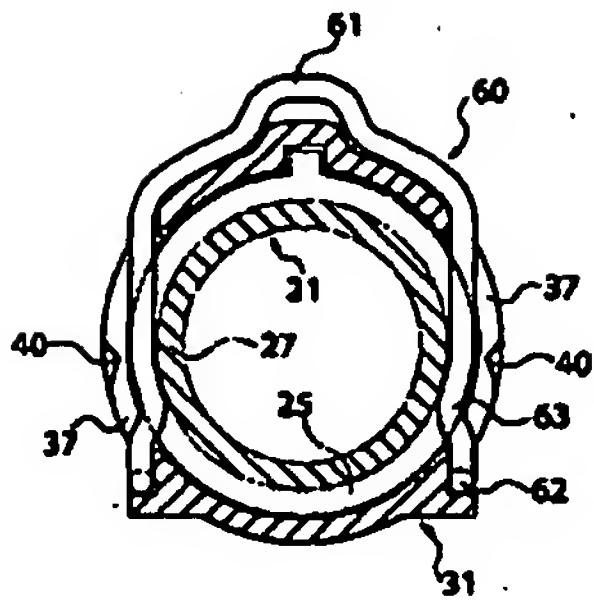
large diameter portion

groove

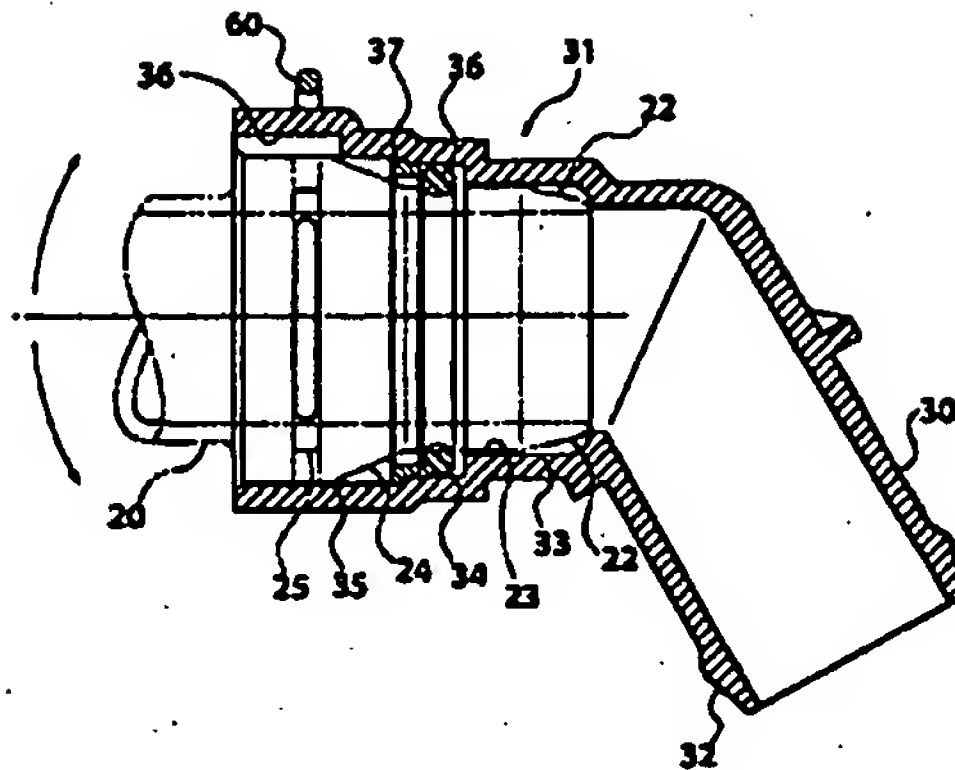
small diameter portion

hold ring

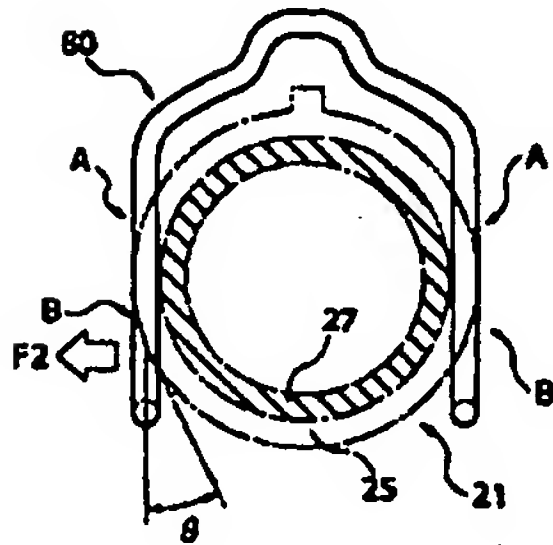
【図6】



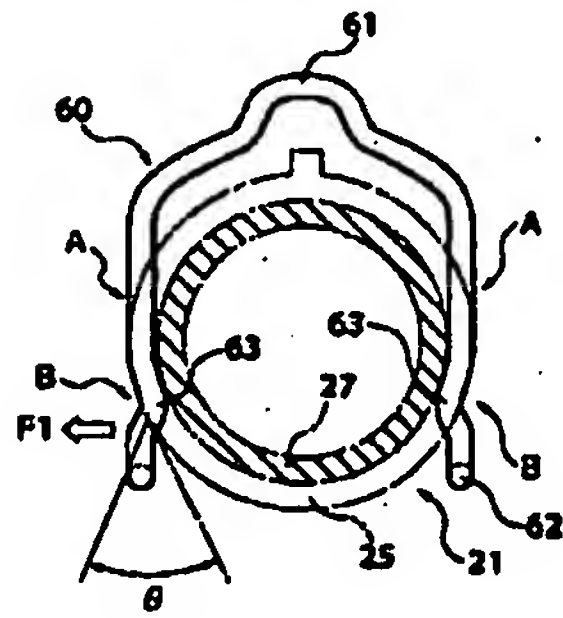
【図7】



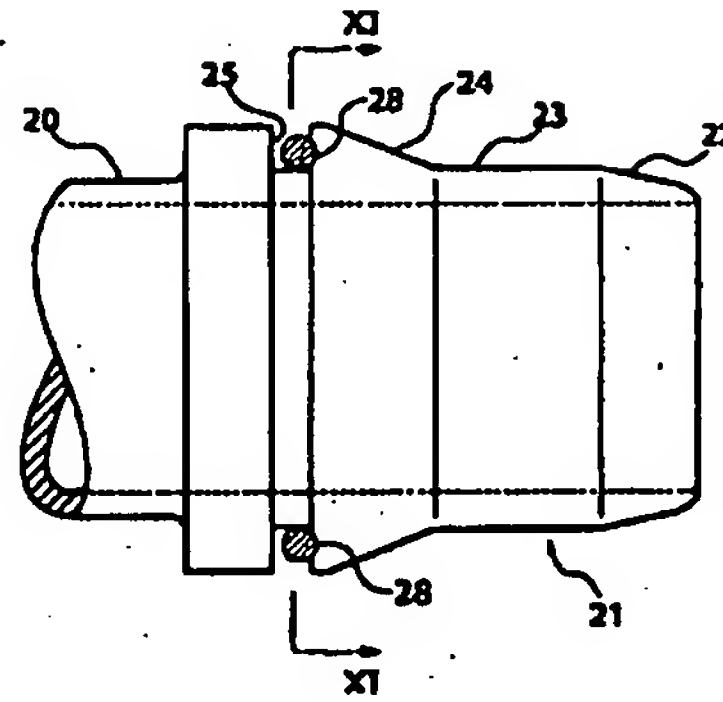
【図8】



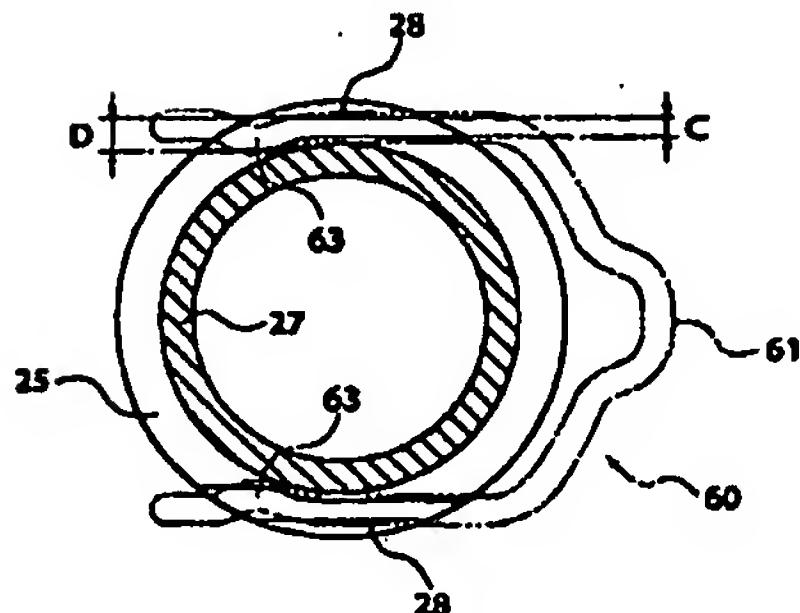
【図9】



【図10】



【図11】



【図12】

